STIC-Biotech/ChemLib

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Subject:

Scheiner, Laurie Friday, June 14, 2002 10:56 PM STIC-Biotech/ChemLib seq. search request (09/808,212)

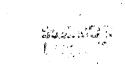
Please search SEQ ID NO:1 of application S.N. 09/808,212. Thanks!

Laurie Scheiner Art Unit 1648 CM1 8E05 308-1122 8E12

Searcher:	Sheppard
Phone:	
Location: _	। ਦਾ. ਹ0ਨ-ਕ ਾ)9
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TYPE OF SEARCH:
NA Sequences:
AA Sequences:
Structures:
Bibliographic:
Litigation:
Full text:
Patent Family:
Other:

VENDOR/COST(where applic.)
STN:
DIALOG:
Questel/Orbit:
DRLink:
Lexis/Nexis:
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Other (specify):



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Total number of hits satisfying chosen parameters:
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Perfect score:
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Maximum Match 1008
Listing first 45 summaries
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 13736207 seqs, 6748477542 residues
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Copyright (c) 1993 - 2000 Compugen Ltd
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BG224555 kp48a03.y	BG225320 kp67d09.y	BE580447 kp77e07.y	BE580799 kp81g04.y	BE223521 kp81g04.y	AL168128 Tetraodon	BH043453 RPCI-24-3	AZ137643 SP_0176_B	BM161844 EST564367	AZ026892 RPCI-23-2	BE579798 kp78h06.y	BE030214 kp40a07.y	AZ167142 SP_0094_B	AZ688789 ENTIN69TR	BH148214 ENTPO41TF	AZ668061 ENTGX67TF	RPCI-23-	60143724	AZ722144 RPCI-24-1	AG136173 Pan trogl	BE223146 kp73c11.y	5	673988	053 Te	37267	60	_	AZ813205 2M0080C24	

ALIGNMENTS

Mus musculus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0124 row: L column: 21
Seq primer: CGTTGTAAAACGACGGCCAGT
Class: plasmid ends University of Utah University of Utah Rm. 308, Biomedical Unpublished (2000) Contact: Robert B. AZ372526

AZ372526

AZ372526

AZ372526 High quality sequence stop: 602 Location/Qualifiers Tel: 801 585 5606 Fax: 801 585 7177 Mouse whole genome plasmid inserts AZ372526 Mammalia; Eutheria; 1 (bases 1 to 602) AZ372526.1 house mouse. USA Biomedical /organism="Mus musculus" /strain="C57BL/6J" /db_xref="taxon:10090" /clone="UUGC1M0124L21" /clone_lib="Mouse 10kb plasmid UUGC1M library" .602 GI:10486226 Genome Center Weiss scaffolding with paired end reads from 10kb Polymers Research Bldg., Beacorn, T., Duval, B., Hamil, C., M., Meenen, E., Pedersen, T., Reilly 20 Š 2030 GSS 02-OCT-2000 sculus genomic Ε., SLC, Ţ

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RESULT
AZ771492
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hes 131;
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University of Utah Genome Center University of Utah
                                         Unpublished (2000)
Contact: Robert B.
                                                                                                                       .M., Rose,M., Rose,R., Stokes,R., Tingey,A., and Wright,D., Weiss,R.
                                                                                  plasmid inserts
                                                                                                  Mouse whole genome
                                                                                                                                                        Junn, D., Aoyagi, A., Barber, M., Bea
Islam, H., Longacre, S., Mahmoud, M.,
                                                                                                                                                                                                 Mammalia; Eutheria;
1 (bases 1 to 518)
                                                                                                                                                                                                                                          Eukaryota; Metazoa;
                                                                                                                                                                                                                                                             Mus musculus
                                                                                                                                                                                                                                                                                                                  AZ771492.1 GI:12893811
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                                                                                                                                                                                                                                                                                                                                                         clone UUGC1M0573L10 R,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        purified. The sheared, adaptored vector DNA, a chemically-competent E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and selected for ampicillin resistance.
48 c 197 g 37 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was perpared from a derivative of pWD42 (g1147321141gb)AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polymerase and T4
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/note="Vector: PWD42nv; Purified genomic DNA from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           igated to the blunt ends
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53.3%;
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                                           Weiss
                                                                                      scaffolding with paired end reads from 10kb
                                                                                                                                                                                                                   Rodentia;
                                                                                                                                                                                                                                        Chordata;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                       plasmid UUGC1M library Mus musculus genomic
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Pred. No. 0.11;
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                                                                                                                                                                                                                   Craniata; Ver Sciurognathi;
                                                                                                                                                  Beacorn, T., Duval, B., Hamil, C., M., Meenen, E., Pedersen, T., Rei
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Matches 109
                                                                                                                                                                                                                       466 GAAGAAGAAGAAG 478
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Plasmodium yoelii yoelii
Plasmodium yoelii yoelii
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                                                                                     mRNA sequence.
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Seq primer: CACACAGGAAACAGCTATGACC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: ddunn@genetics.utah.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tel: 801 585 5606
Fax: 801 585 7177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           adaptored vector DNA, and transformed into chemically competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance. **
91 c 148 g 61 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil4732114)gbln8fr129072.1), a copy-number inducible derivative of plasmid RI. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was recitations.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="Vector: PWD42nv; Purified genormusculus C57BL/6J (male) was obtained
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /lab_host="E. Coli strain XL10-Gold, T1-resistant,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'sex≖"Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone="UUGC1M0573L10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Organism="Mus musculus
Strain="C57BL/6J"
                                                       GI:17305009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 58.6; DB Pred. No. 0.41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Std Error: 0.
Dlumn: 10
                                                                                                                           318 bp
                                                                                                      318 bp mRNA linear
yoelii yoelii cDNA clone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Purified genomic DNA from M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      00
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                                                                                                     EST 04-DEC-2001
PYCJC62 5' end,
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                                                                                                                                                                                                                                                                                                                          198
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                                                                                                                                                                                                             163
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                                                                                                                                                                                                                                                                                                                                                                                                    ttgaagaagcaacagcagaagcttacagatatgcagacttattagcaaaagtaaatggcg 187
                                                                                                                                                                                                                                                                                     AAGAAACAAAAGAAGAAGAAGTTAAAGAAGAAACAAAAGAAGAAACAAAAGAAGAAGAAG 162
                                                                                                                                                                                                                                                                                                                                                                  AAGTTGTAGAAGAAAAAAAAGAAGAGACTAAAGAGGAAGAAAAAGAAGAAGAAACAAAAG 102
                                                                                                                              AAGCAAAAGAAGCTGCAGAAGAAGCTGCAAACGAAGCTGTAAACGAAGCTGCAGAAGAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 133;
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The Institute for Genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Plasmodium yoelii EST project at TIGR Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Carlton, J.M., Daly, T.M., Long, C.A., Bergman, L.W.,
sequence
                IpSkn00051
                                    BM029212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               For clone info, please contact the Malaria Research and Reference Reagent Resource Center, ATCC \cdot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fraser, C.M. and Carucci, D.J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Alveolata; Apicomplexa; Haemosporida;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           http://www.malaria.mr4.org/mr4pages/index.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               186
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301-838-0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     carlton@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           with XhoI and separated on a Sephacryl S-500 column. Size-fractionated cDNA was precipitated and ligated to HybriZAP arms directionally using EcoRI-XhoI cleaved arms. After packaging, the phagemid vector (pAD-GAL4) was excised from the HybriZAP vector and plasmid DNA isolated. To g 26 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jane Carlton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               collected from BALB/cByJ mice infected with Py17XL parasites, and leukocytes removed by passage over microcrystalline cellulose collumns. Total RNA was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              termini were treated with Pfu DNA polymerase and EcoRI adaptors ligated to the blunt ends. The sample was cleaved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         First strand cDNA synthesis was completed using a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note="Vector: pAD-GAL4; At 20-25% parasitemia, blood was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      clone_lib="PyBS"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                strain="17XL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ′organism="Plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 solated using the guanidinium isothiocyanate method,
                  Skin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     to 318;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               23.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              stage="Asexual blood stages"
host="E. coli XL-1 Blue"
              475 bp mRNA cDNA library Ictalurus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dCTP. After second strand synthesis, uneven
                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 58.2; DB 10;
Pred. No. 0.52;
0; Mismatches 103;
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, Rockville,
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                                    mRNA
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              linear
punctatus
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                EST 05-NOV-2001
                                                                                                                                281
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     43
                                                                                                                                                                                                                                                                      GAAGAAGCAGAAGAAGCAGA 242
                                                                                                                                                                                                                                                                                                                                  acagcagaagcttacagatatgcagacttattagcaaaagtaaatggcgaatatacagca 198
                                                                                                                                                                                                                                                                                                                                                                                                           ttaatctttgcagatggaaagatacaaacagcagaattcaaaggaacatttgaagaagca 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                     gacttagaagatggtggaaa 218
Zhao,S., Nierman,W., Malek,J., Shatsman,S., Al
Tsegaye,G., Geer,K., Krol,M., Shvartsbeyn,A.,
Russell,D., de Jong,P. and Fraser,C.M.
                                                                                                                                                                              BH040136 RPCI-24-255A23.TV RPCI-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tel: 334 844 4054 Fax: 334 844 9208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The Fish Molecular Genetics
Department of Fisheries and
and Molecular Biosciences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ictalurus punctatus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Nepergenerygii; Teleostei; Ostariophysi; Siluriforme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM029212
BM029212.1
                                                                                        Mus musculus
                                                                                                                                  BH040136.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    203 Swingle Hall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNAs in the skin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Transcriptome analysis of channel catfish
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Karsi, A., Cao, D., Li, P
Mickett, K.D. and Liu, Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           channel catfish
                                                                       Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seq primer: M13 Reverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Auburn University
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                                                         Mammalia; Eutheria;
                                                                                                        house mouse
                                                                                                                                                              DNA sequence
                                           (bases 1 to 691)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        zliu@acesag.auburn.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Ictalurus punctatus'
/db_xref="taxon:7998"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone_lib="Skin cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="Organ: Skin; Vector: pSport1; Site_1: Not1; Site_2:
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                                                                                                                                  GI:14818806
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                                                         Chordata;
Rodentia;
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   gene expression and microsatellite-containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 57.6; DB Pred. No. 0.62;
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                                                                                                                                                                                            691 bp
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                                                         Craniata; Ver
Sciurognathi;
                                                                                                                                                                              musculus genomic clone
               Shatsman,S., Akinret,B., Lev
Shvartsbeyn,A., Gebregeorgis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kocabas, A.,
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                                                         Vertebrata; Euteleostomi;
thi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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                 Levins,M.
gis,E.,
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Best Local Similarity
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JOURNAL
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                                                                                                                                                                                                                                                                          332
                                                                                                                                                                                                                                                                                                                                                                                        452
                                                                                                                                                                                                                                                                                                                                                  121 ggaacatttgaagaagcaacagcagaagcttacagatatgcagacttattagcaaaagta 180
                                                                                                                                                                                                                                                                                               181 aatggcgaatatacagcagacttagaagatg
                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGAAGAAGAAGAAGAAGAAGAACAAG
                                                                                                                                                                                                                                                                                                                           gttacaatcaaagttaacttaatctttgcagatggaaagatacaaacagcagaattcaaa 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         115;
                                                                                                                                                               BM374465
EBpi03_SQ003_L06_R IGF
clone EBpi03_SQ003_L06
1 (bases 1 to 443)
Hedley,P., Liu,H., Caldwell,D., McCallum,N., Mudie,S.,
Ramsay,L., Machray,G., Marshall,D.F.M. and Waugh,R.
                                                Spermatophyta; Magnoliophyta; Triticeae; Hordeum.
                                                                                                                            EST
                                                                                                            partey.
                                                                                                                                         BM374465.1
                                                                                                                                                         BM374465
                                                                              Eukaryota;
                                                                                             Hordeum vulgare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seq primer: T7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              page: http://ww
Plate: 255 row;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Resources (http://www.chori.org/bacpac/orderingframe.htm).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Other_GSSs: RPCI-24-255A23.TU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                library availability, please contact Pieter de Jong (pdejong@mail.cho.org). Clones may be purchased from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: szhao@tigr.org
Clones are derived from the mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Shaying Department of Euk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Institute for Genomic Research
Medical Center Dr., Rockville,
301 838 0200
301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="Vector: pTARBAC1; Site_1: BamH1; Site_2: BamH1; RPCI-24 Mouse BAC Library produced by Pieter de Jong. The library was cloned in the pTARBAC1 cloning vector at the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BamH1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db_xref="taxon:10090"
/clone="RPCI-24-255A23"
/clone_lib="RPCI-24"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /cell_type="Spleen/Brain"
/note="Vector: pTARBAC1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   End
                                                                           Viridiplantae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       strain="C57BL/6J"
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                                                                                                                                      GI:18117855
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .tigr.org/tdb/bac_ends/mouse/bac_end_intro.html
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 57.4;
Pred. No. 0
                                                                                                                                                                443 bp mRNA linear E Barley EBpi03 library Hordeum 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                           Streptophyta; E
yta; Liliopsida;
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                                                          Embryophyta;
a; Poales; Poa
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                                                                       Tracheophyta;
                                                                                                                                                                            vulgare cDNA
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                Cardle, L.
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                                                                                                          AUTHORS
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                186
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                                                                                                                                                                                                                                                                                                                                                                                 agaagcaacagcagaagcttacagatatgcagacttattagcaaaagtaaatggcgaata 191
                                                                                                                                                                                                                                                                                                                                                                                                                                            agitaacitaatcitigcagaiggaaagatacaaacagcagaaitcaaaggaacaiitga 131
             Parasite Genomics Group
The Institute for Genomic Research
                                                                                                                           Plasmodium yoelii yoelii
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
 9712 Medical
                                            Contact: Jane Carlton
                                                          Unpublished (2001)
                                                                        Plasmodium yoelii EST project at
                                                                                      Carlton, J.M., Daly, T.M., Long, C.A., Fraser, C.M. and Carucci, D.J.
                                                                                                                                                                                                             mRNA sequence
BM164323
                                                                                                                                                                Plasmodium yoelii yoelii.
                                                                                                                                                                                               BM164323.1
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Tel: 00 44 1382 562731
Fax: 00 44 1382 562426
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Unit of Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seq primer: M13 reverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: rwaugh@scri.sari.ac.uk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scottish Crop Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Development of Barley
                                                                                                                       (bases 1 to 379)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="Vector: psport1; Site_1: Sal I; Site_2: Not I;
Non-normalised library, directionally cloned into psport1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="EBpi03_SQ003_L06"
/clone_lib="IGF Barley EBpi03 library"
/tissue_type="Pistils"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /dev_stage="4 days post anthesis"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /cultivar="Optic"
/db_xref="taxon:4513"
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   Center Drive,
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Pred. No. 0.74;
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D2 5DA, Scotland,
                                                                                                                                                                                                                                                      379
                                                                                                                                                                                                                                      379 bp
yoelii
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Rockville,
                                                                                                                                                                                                                                     mRNA linear
yoelii cDNA clone
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                                                                                                      Bergman, L.W.,
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                                                                                                   Vaidya, A.B.,
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PYCLS62 5' end,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      65
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BM162473
LOCUS
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ORIGIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAAGAAGCAAAAGAAGCTGCAGAAGAAGCTGCAAATGAAGCTGTAAACGAAGCTGCAGA 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agcagaagcttacagatatgcagacttattagcaaaagtaaatggcgaatatacagcaga 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   105;
                                     1 (bases 1 to 380)
Carlton, J.M., Daly,
                                                                          Plasmodium yoelii yoelii
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
                                                                                                                                                          EST
                                                                                                                                                                                                                                          EST564996 PyBS Plasmodium
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Plasmodium
                                                                                                                                                                                                  BM162473
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                       Fraser, C.M. and Carucci, D.J
                                                                                                                                   Plasmodium
                                                                                                                                                                             BM162473.1 GI:17308154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    http://www.malaria.mr4.org/mr4pages/index.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    202
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1 37 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /lab_host="E. coli XL-1 Blue"
/note="Vector: pAD-GAL4; At 20-25% parasitemia, blood was collected from BALB/CByJ mice infected with Py17XL parasites, and leukocytes removed by passage over microcrystalline cellulose collumns. Total RNA was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Size-fractionated cDNA was precipitated and ligated to HybriZAP arms directionally using Econ-Xhor cleaved arms. After packaging, the phagemid vector (pAD-GAL4) was excised from the HybriZAP vector and plasmid DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5-methyl dCTP. After second strand synthesis, uneven termini were treated with Pfu DNA polymerase and EcoRI adaptors ligated to the blunt ends. The sample was cleaved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  with XhoI and separated on a Sephacryl S-500 column.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer and reverse transcriptase in the presence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              First strand cDNA synthesis was completed using a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     isolated using the guanidinium isothiocyanate method, a mRNA isolated using oligo(dT)-cellulose chromatography.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           strain="17XL"
yoelii EST project at TIGR
                                                                                                                                   yoelii yoelii.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22.9%;
                                       Daly, T.M., Long, C.A.,
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                                          Bergman, L.W., Vaidya, A.B.,
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Plasmodium yoelii yoelii
Plasmodium yoelii yoelii
                                    BM165811.1
EST.
                                                                                                 BM165811
EST568334 PyBS Plasmodium
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Parasite Genomics Group
The Institute for Genomic Research
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                                                                             BM165811
                                                                                         mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9712 Medical Center Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Jane Carlton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5-methyl dCTP. After second strand synthesis, uneven termini were treated with Pfu DNA polymerase and EcoRI adaptors ligated to the blunt ends. The sample was cleaved with XhoI and separated on a Sephacryl S-500 column. Size-fractionated cDNA was precipitated and ligated to HybriZAP arms directionally using EcoRI-xhoI cleaved arms. After packaging, the phagemid vector (pAD-GAL4) was excised from the HybriZAP vector and plasmid DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     isolated."
1 38 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA isolated using oligo(dT)-cellulose chromatography. First strand cDNA synthesis was completed using a 50\text{-base}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      microcrystalline cellulose collumns. Total RNA was isolated using the guanidinium isothiocyanate method,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               collected from
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /lab_host="E. coli xL-1 Blue"
/note="Vector: pAD-GAL4; At 20-25% parasitemia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /dev_stage="Asexual blood stages"
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Pred. No. 0.
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                   BM163552 608 bp mRNA linear EST 04-
EST566075 PyBS Plasmodium yoelii yoelii cDNA clone PYCLG59
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For clone info, please contact the Malaria Research and Reference
Reagent Resource Center, ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Carlton, J.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9712 Medical Center Drive, Rockville, MD 20850,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Parasite Genomics Group
The Institute for Genomic Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Jane Carlton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (2001)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             http://www.malaria.mr4.org/mr4pages/index.html
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="Vector: pAD-GAL4; At 20-25% parasitemia, blood was collected from BALB/cByJ mice infected with Py17XL parasites, and leukocytes removed by passage over
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           After packaging, the phagemid vector (pAD-GAL4) was excised from the HybriZAP vector and plasmid DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            adaptors ligated to the blunt ends. The sample was cwith XhoI and separated on a Sephacryl S-500 column.
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lab_host="E. coli XL-1 Blue"
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                                                 CAAAAGAAGCTGCAGAAGAAGCTGCAAACGAAGCTGTAAACGAAGCTGCAGAAGAAGTTG 238
                                                                                catttgaagaagcaacagcagaagcttacagatatgcagacttattagcaaaagtaaatg 184
                                                                                                                                                                                                          AAACAAAAGAAGAAGAAGTTAAAGAAGAAACAAAAGAAGAAAAAAGAAGAAGTTA 118
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Parasite Genomics Group
The Institute for Genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Jane Carlton
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                                                                                                                                                                                                                                                                                       Conservative
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/note-"Vector: pAD-GAL4; At 20-25% parasitemia, blood collected from BALB/CBJJ mice infected with Py17XL parasites, and leukocytes removed by passage over
                                                                                                                                                                                                                                                                                                                                                                                                                                                  excised
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/strain="17XL"
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                                                                                                                                                                                                                                                               hes 123;
354 TGAACAAGTAGAAGAAGAAAAGAAATTGAACAACCTGAACAAGTAGAGGTAGAACATGT 413
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                                                                                   TGAGCAAGTAGAACAACCTGAACATGTAGAAGTAGAACAAGTAGAAGAAAAAAGAACAACC 353
                                                                                                                                                                                                                  Carlton,J.M., Daly,T.M., Long,C.A., Bergman,L.W., Vaidya,A.B., Fraser,C.M. and Carucci,D.J.
Plasmodium yoelii EST project at TIGR
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The Institute for Genomic
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/note="Vector: pAD-GAL4; At 20-25% parasitemia, blue collected from BALB/cByJ mice infected with Py17XL parasites, and leukocytes removed by passage over
                                                                                                                                                                                                                                                                                                                                                                                                                  isolated."
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tacaatcaaagttaacttaatctttgcagatggaaagatacaaacagcagaattcaaagg 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (http://www.chori.org/bacpac/rat230.htm). For availability, please contact Pieter de Jong () Clones may be purchased from BACPAC Resources
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9712 Medical Center Dr.,
Tel: 301 838 0200
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1999)
Other_GSSs: CH230-121K14.TJ
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Rattus norvegicus
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BH264512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (http://www.chori.org/bacpac/or ering_information.htm). BAC end
page: http://www.tigr.org/tdb/bac_ends/rat/bac_end_intro.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Clones are derived from the rat BAC library CHORI-230 (http://www.chori.org/bacpac/rat230.htm). For BAC library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jong,P. and rraser,C.M.
Rat BAC End Sequences from Library CHORI-230 EcoRI segment
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Class: BAC ends
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Shaying Zhao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: szhao@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mammalia; Eutheria;
                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 550)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer: T7
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                                                                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P. and Fraser, C.M
                                                                                                                                                                                                                                                                                                    /note="Vector: pTARBAC2.1; Site_1: EcoRI; CHORI:-230 Rat (BN/SSNHSd/MCW) BAC library Pieter de Jong" 48 g 292 t
                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="taxon:10116"
/clone="CH230-121K14"
                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Rattus norvegicus"
/strain="BN/SsNHsd/MCW"
                                                                                                                                                                                                                                                                                                                                                                         /cell_
                                                                                                                                                                                                                                                                                                                                                                                       /sex="Female"
                                                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="CHORI-230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                      type="Brain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shatsman,S., Tsegaye,G., (), Overton,L., Russell,D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               column:
                                                                                                                                                                                                                   Score 55; DB 12; Length 550 Pred. No. 1.7;
                                                                                                                                                                                                                                                                                                   48 g
                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rockville,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               550 bp
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Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                       Segment 1"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               de Jong (pdejong@mail.cho.org).
                                                                                                                                                                                                     100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20850, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
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                                                                                                                                                                                                                                                                                                                                                      Site_2: EcoRI;
                                                                                                                                                                                                                                                                                                                                        produced
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VERSION
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AZ600777/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
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                                                                                        BASE COUNT
ORIGIN
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                 Query Match
Best Local
Matches 115;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AZ600777 546 bp DNA linear GSS 13-DEC-200 1M0418D18R Mouse 10kb plasmid UUGC1M library Mus musculus genomic clone UUGC1M0418D18 R, DNA sequence. AZ600777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mouse whole genome scaffolding with paired end reads from 10kb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AZ600777.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        University of Utah
University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   plasmid inserts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ,M., Rose,M., Rose,R., Stokes,R., and Wright,D.,Weiss,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dunn,D., Aoyagi,A., Barber,M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mammalia; Eutheria;
1 (bases 1 to 546)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     house mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         High quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seq primer: CACACAGGAAACAGCTATGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Robert B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Islam, H., Longacre, S., Mahmoud, M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa;
                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .ass: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          308,
Conservative
                                                                                                           72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Biomedical Polymers Research Bldg.,
                                                                                                                                                                                               adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil4732114)gblAF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and
                                                                                                         adaptored vector DNA, and transformed in chemically-competent E. coli XL10-Gold and selected for ampicillin resistance, 130 c 59 g 285 t
                                                                                                                                                                                                                                                                                                           was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The
                                                                                                                                                                                                                                                                                                                                                                                                                                       /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"/note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J_(male) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                     (http://www.jax.org/resources/documents/dnares/).
                                                                                                                                                                                                                                                                                                                                                                                                                          laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        strain-"C57BL/6J"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     one="UUGC1M0418D18"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence stop:
                                                                                                                                                                                                                                                                                                                                                                  hydrodynamically sheared by repeated passage through a 5 inch orifice at constant velocity. The sheared DNA
                   21.8%;
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                                                                                                                                                             The sheared, adaptored mouse DNA was vector DNA, and transformed into
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                   Score 54.4; DB 12; Pred. No. 2.2;
     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               546
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Fingey,A., von Niederhausern,A.
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       101;
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                                      Length 546;
     Indels
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                                                                                                                                    (Stratagene) cells
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AZ460541 596 bp DNA linear GSS 04 1M0265124R Mouse 10kb plasmid UUGClM library Mus musculús clone UUGClM0265124 R, DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Email: ddunn@genetics.utah.
Insert Length: 10000 Std
Plate: 0265 row: I column
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       University of Utah (University of Utah)
Rm. 308, Biomedical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         plasmid inserts
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Dunnslam, H., Longacre, S., Mahmoud, M., Meenen, E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Plate: 0265 row: I column: 24
Seq primer: CACACAGGAAACAGCTATGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nouse mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ammalia; Eutheria; (bases 1 to 596)
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Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     plasmid ends
adaptored DNA was purified and size-selected for a 9.5 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivat of pwD42 (gi|4732114|gb|AF129072.1), a copy-number
                                                                                                                                  (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4
                                                                                                                                                                                                               musculus C57BL/6J (male) was obtained Laboratory Mouse DNA Resource
                                                                                                                   polynucleotide kinase. Adaptor oligonucleotides were
                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:10090"
/clone="UUGC1M0265124"
                                                                                                                                                                                                                                                                                                                                                                     /organism="Mus musculus
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                        /note="Vector:
                                                                                                                                                                                                                                                                                              /sex="Male"
                                                                                                                                                                                                                                                                                                              /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                        lab_host="E. Coli strain XL10-Gold,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Weiss
Genome
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                                                                                                                                                                                                                                                          Purified genomic DNA
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JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hordeum vulgare
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae; Pooidea
; Triticeae; Hordeum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BM441017 481 bp mRNA EBed02_SQ002_C23_R IGF Barley EBed02 libb clone EBed02_SQ002_C23 5', mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (2001)
Contact: Waugh R
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hedley,P., Liu,H., Caldwell,D., McCallum,N., Mudie,S., Ramsay,L., Machray,G., Marshall,D.F.M. and Waugh,R. Development of Barley Transcriptome Resources
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and selected for ampicillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells
/note="Vector: pspORT1; Site_1: Sal 1; Site_2: Not 1; Non-normalised library, directionally cloned into pspORT1. Non-normalised from endosperm tissue dissected from developing grains (8 days post anthesis) in glasshouse grown barley plants. Developed as part of the barley transcriptome
                                                                                      /clone="EBed02_S0002_C23"
/clone_lib="IGF Harley EBed02 library"
/tissue_type="Endosperm"
/dev_stage="8 days post anthesis"
/lab_host="DH10B"
                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                      organism="Hordeum vulgare"
                                                                                                                                                                                    db_xref="taxon:4513"
                                                                                                                                                                                                       'cultivar="Optic"
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Qy ₽ BASE COUNT ORIGIN Matches Query Match
Best Local Similarity 378 144 agaagettacagatatgeagaettattageaaaagtaaatggegaatatacageagaett 203 318 204 agaagatggtggaaa 218 84 ctttgcagatggaaagatacaaacagcagaattcaaaggaacatttgaagaagcaacagc 143 24 agaaacaccagaaacaccagaagaaccaaaagaagaagttacaatcaaagttaacttaat 107; Conservative 21.8%; 0, Score 54.2; Pred. No. 2 Mismatches 4 DΒ 88; 10; Indels Length 481; 0; Gaps 377 83

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Search completed: June 19, Job time: 6349 sec 2002, 18:11:45 밁 Qy 밁

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US-08-828-741B-1

US-09-160-567-12

US-09-160-567-12

US-09-160-567-7

US-08-828-741B-7

US-08-828-741B-5

US-09-160-567-5

US-09-160-567-3

US-09-160-567-3

US-09-160-567-3

US-09-160-567-3

US-09-17-98-28-1

US-08-719-822B-1

US-08-719-822B-1

US-08-257-073-15

US-08-257-073-15

US-08-257-073-15

US-08-257-073-15

US-08-257-25-41

US-08-462-625-45

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US-08-446-137B-3
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                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/446,137
FILING DATE: 22-MAY-1995
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                              TELEPHONE: (206) 622-49
TELEFAX: (206) 682-6031
[NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: Seattle CITY: Seattle cmaTE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Atkinson, Anthony
APPLICANT: Murphy, Jonathan P.
APPLICANT: Laurence, Oliver S.
APPLICANT: Duggleby, Clive J.
TITLE OF INVENTION: IMMUNOGLOBULIN BINDING PROTEINS DERIVED
TITLE OF INVENTION: FROM L PROTEIN AND THEIR USES
                                         ANTI-SENSE: NO
ANTI-SENSE: NO
TYPE: N-terminal
                                                                                                                                                                                                                  REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 100
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                           FRAGMENT TYPE:
ORIGINAL SOURCE:
ORGANISM: Pep
                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: McMasters, David D
REGISTRATION NUMBER: 33,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                            TOPOLOGY: linear
                                                                                                                                 LENGTH: 876 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: U
ZIP: 98104
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                                                                                                                                                                                                          (206) 622-4900
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US-08-858-2078-132
US-09-08-2078-17
US-09-244-796-17
US-09-23-691-207
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Result

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Match Query

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876 3279 921 1308 548 548 539 539 539 539 539 1031

107 107 107 107 107

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107 107 Minimum DB Maximum DB

seq length: 0 seq length: 2000000000

Sequence: Title: Perfect score:

US-09-808-212A-1 249

Scoring table:

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Copyright

GenCore version (c) 1993 - 2000

4.5 Compugen Ltd

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

Issued_Patents_NA:*

; NAME/KEY: ; LOCATION: US-08-446-137B-3

CDS 1..876

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Best Local Similarity
Matches 238; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Applic Patent No. 6162903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                            TELEFAX: (206) 682-6031 NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      808
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                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 ggaaaataa 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 gttacaatcaaagttaacttaatctttgcagatggaaagatacaaacagcagaattcaaa 120
                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                       NAME: McMasters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 100
FELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                            OMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/01
FILING DATE: 22-MAY-1995
                                                                                                                                                                                                                                                                                              OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                COMPUTER:
                                                                                                                                                                                                                      CLASSIFICATION:
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                               STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aatggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgct 240
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                                                                                                                                                                                                                                                                                                                                                              98104
                                              nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/08446137B
                                                                                                                                                                                                                                                                                                                                                                                         Washington
                                                         3279 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                      6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Duggleby, Clive J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Murphy, Jonathan P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Atkinson, Anthony
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Trowern, Angus K.
                                                                                                                                                                                                                                                                                                E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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                  linear
                                                                                                                           (206) 622-4900
                               double
DNA (genomic)
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Pred: No. 1.
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US-08-795-475-2

Sequence 2, Application Patent No. 5965390 GENERAL INFORMATION:

US/08795475

1755

1695

APPLICANT: BJYTCK, LATS APPLICANT: SJYDTING, Ulf TITLE OF INVENTION: PROTEIN L AND HYBRID PROTEINS THEREOF

CORRESPONDENCE ADDRESS

ADDRESSEE:

6300 Columbia Center, 701

SEED and BERRY LLP

NUMBER OF SEQUENCES:

COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk

COUNTRY:

USA

98104-7092

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Best Local Similarity
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                                                                                                                                                                                                                                             1696
                                                                                                                                                                                 1636 GTTACAATCAAAGTTAACTTAATCTTTGCAGATGGAAAAACACAAACAGCAGAATTCAAA
                                                         1756 AATGGTGAATACAÇAGCAGACTTAGAAGATGGCGGATACACTATCAACATCAAATTTGCT 1815
1816 GGAAAAGAA 1824
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                                                                                         181
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OTHER INFORMATION:
                           241 ggaaaataa
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LOCATION: 280:.3183
OTHER INFORMATION: /codon_start= 280
OTHER INFORMATION: /product= "mature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: CDS: LOCATION: 103.3186
OTHER INFORMATION: /
OTHER INFORMATION: /
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                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
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                                                                                    aatggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgct 240
                                                                                                                     GGAACATTTGAAGAAGCAACAGCAGAAGCTTACAGATATGCAGACTTATTAGCAAAAGTA
                                                                                                                                                                                                                                                                                                             237;
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208..279
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/evidence= EXPERIMENTAL
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/codon_start= 28
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Best Local Similarity
Matches 214; Conserv
                                                                                                                                                                                                                                                                                                             Sequence 4,
STATE: "--STATE: USA COUNTRY: USA ZIP: 98104-7092
ZIP: 98104-7092
COMPUTER READABLE FORM: PLOPSY disk PC-DOS/MS-DOS PC-1-986 #1.0,
                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                         quence 4, Application US/08795475 tent No. 5965390
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HYPOTHETICAL: NO
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                                                                                                                                                                                                          APPLICANT: BJVICK, LAIS
APPLICANT: SJVDING, U1f
TITLE OF INVENTION: PROTEIN L AND HYBRID PROTEINS THEREOF
NUMBER OF SEQUENCES: 14
                                                                                                                                                                                        CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      827
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                                                                                                                                                                                                                                                                                                                                                                                                   887 GTAAGAAA 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  182 atggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgctg
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      653 TAAATATTAAATTTGCTGGAAAAGAAA-----AAACACCAGAAGAACCAAAAGAAGAAG 706
                                                                                                                                                                                                                                                                                                                                                                                                                                 242 gaaaataa 249
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 11-FEE CLASSIFICATION: 43:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: double
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                                                                                                                                                           STREET:
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                                                                                                                                            CITY: Seattle
                                                                                                                                                                         ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 921 base pairs
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                                                                                                                                                       E: SEED and BERRY LLP 6300 Columbia Center,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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        PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA (genomic)
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86.3%;
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                                                                                                                                                         701 Fifth Avenue
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Best Local Similarity
Matches 214; Conser
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                                 242 gaaaataa
                                                                                        182 atggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgctg 241
                                                                                                                                            767
                                                                                                                                                            122 gaacatttgaagaagcaacagcagaagcttacagatatgcagacttattagcaaaagtaa 181
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                                                                                                                                                                                                                                                                                 653 TAAATATTAAATTTGCTGGAAAAGAAA-----AAACACCAGAAGAACCAAAAGAAGAAG 706
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TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                 62 ttacaatcaaagttaacttaatctttgcagatggaaagatacaaacagcagaattcaaag 121
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REFERENCE/DOCKET NUMBER: 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE:
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                                                                                                                                                                                                                                                                                                       GTAAGAAA
                                                                    ATGGTAAATATACAGCAGACTTAGAAGATGGTGGATACACTATTAATATTAGATTTGCAG
                                                                                                                                          GAACATTTGCAGAAGCAACAGCAGAAGCATACAGATACGCTGACTTATTAGCAAAAGAAA
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                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unknown
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RESULT 5 US-08-828-741B-1 Sequence 1, Application US/08828741B Patent No. 6043069 GENERAL INFORMATION: APPLICANT:
APPLICANT:
APPLICANT: COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS: TITLE OF INVENTION: CATALYTIC ANTIBODIES AND A METHOD OF TITLE OF INVENTION: PRODUCING SAME COUNTRY: COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS ADDRESSEE: 11530 Garden New York 400 Garden City Plaza arden City United States of America Treutlein, Herbert R /ENTION: CATALYTIC A Tarlinton, David Suess, Koentgen, Frank PatentIn Release #1.0, SCULLY, Gabriele M. SCOTT, MURPHY & PRESSER Version #1.30

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Best Local Similarity
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NFORMATION FOR SEQ ID NO: 1:
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                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          172 GAAGCTTATGCGTATGCAGATACTTTGAAGAAAGACAATGGTGAATATACTGTAGATGTT 231
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              CURRENT APPLICATION DATA:
                                                                                                                                                                                                                               UMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        232 GCAGATAAAGGTTACACCCTGAACATCAAATTCGCGGGTAAAGAA 276
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                                                                                                                                                                                                                                              PPLICANT: Treutlein, Herbert R.
ITLE OF INVENTION: CATALYTIC ANTIBODIES AND A METHOD OF INVENTION: PRODUCING SAME
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                                                                                                                                                                                 STREET:
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                                               OPERATING SYSTEM:
                                                                                                                               COUNTRY:
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APPLICATION NUMBER:
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                                                                                                                                               Garden City
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nucleic acid
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                                 PatentIn
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                                               IBM PC compatible SYSTEM: PC-DOS/MS-DOS
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                              Release #1.0, Version #1.30
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US/09/160,567
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Pred. No. 2.
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TELEX: 230 901 SANS UR
INFORMATION FOR SEQ LID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 548 base pairs
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
              COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC:DOS/MS-DOS
SOCTWARE: PATENTIA Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                   TITLE OF INVENTION: CATALYTIC ANTI
                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
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                                                                                                                                                                                 STREET:
                                                                                                                                                               CITY: Garden City
                                                                                                                                 COUNTRY:
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                                                                                                                                                 New York
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VENTION: CATALYTIC ANTIBODIES AND A METHOD OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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US/08/828,741B
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Pred. No. 2.
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ATTORNEY/AGENT INFORMATION

REFERENCE/DOCKET NUMBER: 10591

REGISTRATION NUMBER:

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Best Local Similarity
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TELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC -DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                     OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                              PPLICANT: Treutlein, Herbert R.
PITLE OF INVENTION: CATALYTIC ANTIBODIES AND A METHOD PRODUCING SAME
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                                      CLASSIFICATION:
                                                      FILING DATE:
                                                                     APPLICATION NUMBER:
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IOR APPLICATION DATA: APPLICATION NUMBER:
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T: 400 Garden City Plaza
Garden City
: New York
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08/828,741
                                                                     us/09/160,567
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Pred. No. 1.2e-17;
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                                                                                                       Version #1.30
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Best Local S
Matches 140
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TELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO:
                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
ATTORNEY/AGENT INFORMATION NAME: DiGiglio, Frank S.
                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Koentgen, Frank
APPLICANT: Suess, Gabriele M.
APPLICANT: Tarlinton, David M.
APPLICANT: Treutlein, Herbert R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: SCULLY, S
                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    214 TTCGCGGGTAAAGAA 228
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LOCATION:
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les 140; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: DiGiglio, Fra
REGISTRATION NUMBER:
                                                                                                                                                                                                                                         STREET: 400 Garden CITY: Garden City
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER:
                                     CLASSIFICATION:
                                                     FILING DATE:
                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION:
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                                                                                                                                                                                                       United States of America
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                                                   26-MAR-1997
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                                                                                                                                                                                                                                                                                                                           CATALYTIC PRODUCING
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71.8%;
                                                                                                                                                                                                                                                         SCOTT, MURPHY & PRESSER City Plaza
                                                                   US/08/828,741B
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                                                                                                                                                                                                                                                                                                                             ANTIBODIES AND A METHOD OF SAME
                                                                                                     Version #1.30
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TELEPHONE: (516) 742-4343

(516)

REFERENCE/DOCKET NUMBER: REGISTRATION NUMBER:

31,346

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US-09-160-567-7
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; LOCATION:
US-08-828-741B-7
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Patent No. 6326179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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                                                                                                                              SOFTWARE: PatentIn Release #1:0, Version #1.30 CURRENT APPLICATION DATA:
ATTORNEY/AGENT INFORMATION: NAME: DiGiglio, Frank S.
                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS
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                                                                               CLASSIFICATION:
                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                          PLICANT: Treutlein, Herbert R.
TTLE OF INVENTION: CATALYTIC ANTIBODIES AND A METHOD OF INVENTION: PRODUCING SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 599 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94
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                                                                                                                                                                                                                                    11530
                                                                                                                                                                                                                                                                               Garden City
                                                                                                                                                                                                                                                                  New York
                                                                                                                                                                                                                                                                                             E: SCULLY, SCOTT, MURN
                                                                                                                                                                                                                                                                                                                                                                                                                Tarlinton, David M
                                                                                                                                                                                                                                                United States of America
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                                                08/828,741
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Pred. No. 1
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US-08-828-741B-5
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; LOCATION:
US-09-160-567-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 5,
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     CLASSIFICATION.
ATTORNEY/AGENT INFORMATION:
NAME: Diciglio, Frank S.
NAME: Diciglio, 31,346
                                                                                                        SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                         COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 599 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
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                                                                           APPLICATION NUMBER: FILING DATE: 26-MAI
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                                                                                                                                        OPERATING SYSTEM:
                                                                                                                                                         COMPUTER:
                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                      STREET:
                                                                                                                                                                        MEDIUM TYPE:
                                                                                                                                                                                                                                                                                       ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCAAAGGTACCTTCGAAAAAGCGACCTCGGAAGCTTATGCGTATGCAGATACTTTGAAG 213
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                                                                                                                                                                                                                                      Garden City
: New York
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                                                                                                                                                                                                                                                                      E: SCULLY, SCOTT, MURPHY & PRESSER 400 Garden City Plaza
                                                                                                                                                                                                                       .United States of America
DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                      Treutlein,
                                                                                                                                                                                                                                                                                                                                                                                                    Suess, Gabriele M.
                                                                                                                                                                                                                                                                                                                                                                                  Tarlinton, David M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                         IBM PC compatible
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                                                                          26-MAR-1997
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71.8%;
                                                                                                                                        PC-DOS/MS-DOS
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CATALYTIC
                                                                                         US/08/828,741B
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Pred. No. 1.2e-17;
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                                                                                                                         Version #1.30
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TELEX: 230 901 SANS UR INFORMATION FOR SEQ ID NO:

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TELEFAX: TELEPHONE:

(516)

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(516) 742-4343

SEQUENCE CHARACTERISTICS:

LENGTH:

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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tent No.
                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                     CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                                 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         135 agcaacagcagaagcttacagatatgcagacttattagcaaaagtaaatggcgaatatac 194
                                                                                                                                                                                                                                                                                                                                                                                          ORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                            TUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 666 TGTAGATGTTGCAGATAAAGGTTACACCCTGAACATCAAATTCGCGGGTAAAGAA 720
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REFERENCE/DOCKET NUMBER: 10 ELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
LOCATION:
                          NAME: DiGiglio, Frank S. REGISTRATION NUMBER: 31,346
                                                                                                                                                                                                                                          COMPUTER:
                                                                                                                                                                                                                                                                                           COUNTRY: UZIP: 11530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    75 taacttaatctttgcagatggaaagatacaaacagcagaattcaaaggaacatttgaaga 134
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                                                                                    FILING DATE:
                                                                                                                                     CLASSIFICATION:
                                                                                                                                                       FILING DATE
                                                                                                                                                                                                                     OPERATING SYSTEM:
                                                                                                                                                                                                                                                          MEDIUM TYPE:
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                                                                                                                                                                     APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                           New York
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                                                                                                                                                                                                                                                                                                         United States of America
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Treutlein, Herbert
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                                                                                                                                                                                                        PatentIn
                                                                                                                                                                                                                     IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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CATALYTIC ANTIBODIES AND A METHOD OF PRODUCING SAME
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                                                                                                                                                                                                     Release #1.0, Version #1.30
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                                                                                                  08/828,741
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Best Local Similarity
Matches 155; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3, Applic Patent No. 6043069
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TELEX: 230 901 SANS UI
NFORMATION FOR SEQ ID NO:
                                                                                                                                                     OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRINT APPLICATION DATA:
APPLICATION NUMBER: US/08/828,741B
                                                                                                                                                                                                                                                                                                 STREET: 400 CITY: Garden City
STATE: New York
Third St
                                                                  ATTORNEY/AGENT INFORMATION:
NAME: DiGiglio, Frank S.
REGISTRATION NUMBER: 31,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
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                              TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                      FITLE OF INVENTION:
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                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                        CLASSIFICATION:
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                                                     REFERENCE/DOCKET NUMBER:
                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                             COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                E: SCULLY, SCOTT, MURPHY & PRESSER 400 Garden City Plaza
(516)
                                                                                                                                                                                                                                                                                               United States of America
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(516) 742-4366
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CATALYTIC ANTIBODIES AND A METHOD
PRODUCING SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Frank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      David M.
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Pred. No. 1.3e-17
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665

Gaps

INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 1490 base pair

nucleic acid

MOLECULE TYPE: DNA (genomic)

linear

single

NAME/KEY:

CDS

1..1490

LOCATION:

TOPOLOGY: STRANDEDNESS:

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Best Local Similarity
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                                                                                                                                                                  CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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NAME: DiGiglio, Frank S.
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                                                  REFERENCE/DOCKET NUMBER: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ITLE OF INVENTION:
                                                                                                                                                                                                                                            COMPUTER: IBM.PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Palann
TELEFAX: (-
                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                  NAME: DiGiglio, Frank S. REGISTRATION NUMBER: 31,346
                                                                                                                                                    APPLICATION NUMBER:
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                                  TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                    11530
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Treutlein, Herbert R.
TYPENTION: CATALYTIC ANTIBODIES AND A METHOD OF IVENTION: PRODUCING SAME
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     (516) 742-4366
30 901 SANS UR
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                                     (516) 742-4343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gabriele M
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is-09-160-567-3
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Best Local Similarity 66.0%;
Matches 155; Conservative
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patent No. 5532133
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                                                                TELEX: (212)753-623
TELEX: 236687
INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: DOS PC compatible

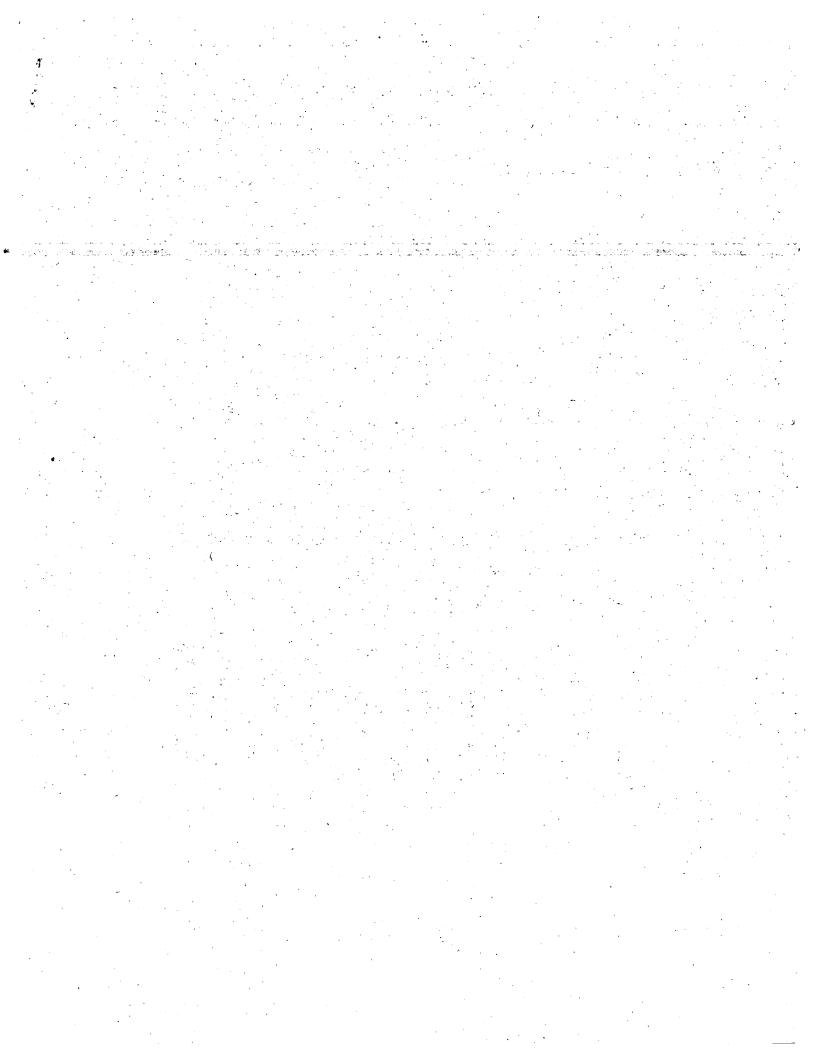
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: GOGOTIS, Adda
REGISTRATION NUMBER: 29,714
                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Rel
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   486 TGGTGGTAGCGAAAACCTGTACTTCCAGGGTGGTAGCGCCGAAGAAGTCACGATCAAAGC 545
                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: (212)527-7700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          666, TGTAGATGTTGCAGATAAAGGTTACACCCTGAACATCAAATTCGCGGGTAAAGAA 720
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                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: New York
                                                                                                                                                                                                                                          APPLICATION NUMBER: USE FILING DATE: 19930602
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                                                                                                                                                       REFERENCE/DOCKET NUMBER:
STRANDEDNESS:
                                ENGTH:
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                                                                                                      (212)753-6237
                                                                                                                                                                                                                                                                                           PatentIn
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                                                                                                                                                                                                                                                                                               Release #1.0, Version #1.25
                                                                                                                                                                                                                                                              US/08/072,610
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665

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linear

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; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Plasmodium vivax
; IMMEDIATE SOURCE:
; CLONE: PVMB3.3.1
US-08-072-610-1
Search completed: June 19, 2002, 18:43:44 Job time: 4150 sec
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                                                                           199 gacttagaagatg 211
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1458 GAAGGAGAAGAAG 1470
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                                                                                                                                                                                                                           79 ttaatctttgcagatggaaagatacaaacagcagaattcaaaggaacatttgaagaagca 138
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Maximum Match 100%
Listing first 45 summaries
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100.0
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                PpL mutant nucleot
PpL mutant nucleot
PpL mutant nucleot
PpL mutant nucleot
Immunoglobulin bin
Sequence encoding
Sequence encoding
                                                                                                                                                                                         Description
                                                                                                                                                 Ig light chain bin
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Plasmodium vivax E	AAH76457	22	ω		50.6
DNA encoding a sec	\vdash	20	3337	20.3	50.6
P. vivax ESP-1 blc	AAT34620	17	33	20.3	0
DNA encoding novel	AAS90702	23	16	0	51.2
_	AAS69549	23	483	20.6	Ξ.
Mouse poly Ig rec	AAV15422	19	29392		۶
	AAS90722	23	1407	1.	ω
Plasmodi	AAA70099	21	3579		55
	AAT05868	17	3399	2	56
DNA encoding	AAS90909	23	379	22.5	56
DNA encoding	AAS75428	23	379		56
	AAQ87587	16	1686	w	58.6
Expression ve	AAA71428	21	6094	4.	86.2
DNA encoding (AAX34591	20	1490	ω	107
Growth factor (AAT91587	18	1490	ω.	107
DNA encoding	AAX34596	20	1479	43.0	107
DNA encoding 1	AAX34592	20	1031	Ψ	107
Growth factor T	AAT91589	18	1031	ω.	107
 DNA encoding a 	AAX34593	20	. 599	43.0	107
Growth factor L	AAT91588	18	599	ω.	107
DNA encoding a	AAX34595	20	539	ω.	107
Growth factor	AAT91591	18	539	ω.	107
DNA encoding a	AAX34590	20	548	4.	109.8
	AAT91586	18	548	٠.	•
	AAA08430	21	213	1	•
	AAA08426	21	228	4	136.4
	AAA08427	21	216	ω.	٠
	AAA08428	21	216	<u>ა</u>	•
Peptostrep	AAA08429	21	216	9	71.
Nucleotio	AAF24730	22	1418	2	٠
Sequence encoding	AAQ50453	14	1308		81.
Nucleotide sequenc	AAF24725	22	0	2	81.
ProtL-CBDcex encod	AAC84644	22	1305	٥.	81.
Sequence encoding		14	921	72.8	
Peptostreptococcus	AAA08431	21	213	77.0	191.8
Peptostreptococcus	w	21	222	82.1	4

ALIGNMENTS

AAA08425 RESULT

AAA08425 standard; DNA; 249

ВP

20-JUL-2000 AAA08425;

(first entry)

PR XX WPI; 2000-271441/23. P-PSDB; AAY82536. Gore MG, 14-SEP-1998; 26-APR-1999; 14-SEP-1999; Immunoglobulin light chain binding protein; PPL; protein L; Peptostreptococcus; human immunoglobulin kappa chain; immunoaffinity chromatography; ds. (ACTI-) ACTINOVA LTD 23-MAR-2000 WO200015803-A1 Péptostreptococcus Ig light chain binding protein PpL construct DNA sequence SEQ ID NO:1. Beckingham JA, 98GB-0019998 99GB-0009578 99WO-GB03048 sp. Roberts SE

Peptostreptococcus

New modified immunoglobulin light chain binding

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Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunoaffinity chromatography, has a dissociation constant of more at pH8 with respect to human immunoglobulin Kappa chain
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein L.
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                                                                                                                                                                                                                                                                                                                    20-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                        AAA08443 standard; DNA;
                                                                                                                                                           23-MAR-2000
                                                                                                                                                                                     WO200015803-A1
                                                                                                                                                                                                             Peptostreptococcus
                                                                                                                                                                                                                                                               Immunoglobulin light chain binding protein; PpL;
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WPI; 2000-271441/23
P-PSDB; AAY82546
                                        Gore MG,
                                                                                           14-SEP-1998;
26-APR-1999;
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                                                               (ACTI-) ACTINOVA LTD
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                                        Beckingham
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                                                                                                                                                                                                                                       chromatography; site directed mutagenesis;
                                                                                           98GB-0019998.
99GB-0009578.
                                                                                                                                    99WO-GB03048
                                                                                                                                                                                                                                                        human immunoglobulin
                                           JA,
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                                           Roberts SE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes an immunoglobulin (Ig) light chain binding protein (P1) which has been modified by one or more amino acid substitutions such that the dissociation constant (Kd) of the protein with respect to human Ig kappa-chain is 400 nM or more at pH8. P1 is useful in immunoaffinity chromatography. The present sequence encodes a mutant Peptostreptococcus protein L, which is an Ig light chain binding protein, from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New modified immunoglobulin light chain binding protein, used immunoaffinity chromatography, has a dissociation constant of more at pH8 with respect to human immunoglobulin kappa-chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 249 BP; 117 A; 37 C; 47 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 51; 56pp; English.
                                                                                                                                                                                                       peptostreptococcus; numan immunogiculii kap
immunoaffinity chromatography; site directed
                                                                                                                                                                                                                                Immunoglobulin light
                                                                                                                                                                                                                                                      PpL mutant nucleotide sequence SEQ
                                                                                                                                                                                                                                                                             20-JUL-2000
                                                                                                                                                                                                                                                                                                     AAA08442;
                                                                                                                                                                                                                                                                                                                            AAA08442 standard;
                                                                                                        14-SEP-1999;
                                                                                                                                                        WO200015803-A1.
                                                                                                                                                                             Peptostréptococcus
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                                                                                                                                  23-MAR-2000
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                        Gore MG,
                                                                      14-SEP-1998;
26-APR-1999;
                                             (ACTI-) ACTINOVA LTD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gttacaatcaaagttaacttaatctttgcagatggaaagatacaaacagcagaattcaaa
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99GB-0009578
                                                                                                          99WO-GB03048
                                                                                                                                                                                                                                                                                                                                DNA;
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99.2%;
                                                                                                                                                                                                                                chain binding
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                  Roberts
                                                                                                                                                                                                                       immunoglobulin
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Pred. No. 2.9
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                                                                                                                                                                                                                                                           ID NO:19
                                                                                                                                                                                                                                 protein; PpL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .9e-44;
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                                                                                                                                                                                                            mutagenesis;
                                                                                                                                                                                                                        chain; mutant;
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Best Local Similarity 98.8
Matches 246; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              binding protein (P1) which has been modified by one or more amino acid substitutions such that the dissociation constant (Rd) of the protein with respect to human Ig kappa-chain is 400 nM or more at pH8. Pl is useful in immunoaffinity chromatography. The present sequence encodes a mutant Peptostreptococcus protein L, which is an Ig light chain binding protein, from the present invention.
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                        Gore MG,
                                                                    (ACTI-) ACTINOVA LTD
                                                                                                                   14-SEP-1998;
26-APR-1999;
                                                                                                                                                                                        14-SEP-1999;
                                                                                                                                                                                                                                       23-MAR-2000
                                                                                                                                                                                                                                                                                      WO200015803-A1
                                                                                                                                                                                                                                                                                                                                  Peptostreptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                             Immunoglobulin light chain binding
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
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                   Beckingham JA,
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                                                                                                                 98GB-0019998
99GB-0009578
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98.8%;
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                      Roberts
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Pred. No. 6.5e-44;
0; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        47 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ
                      SE;
                                                                                                                                                                                                                                                                                                                                                                                                  protein; PpL; protein L;
obulin kappa chain; mutan
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                                                                                                                                                                                                                                                                                                                                                                                 mutagenesis;
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Best Local Similarity
Matches: 246; Conserv
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P-PSDB;
                                               14-SEP-1998;
26-APR-1999;
                                                                                                              23-MAR-2000
                                                                                                                                                            Peptostreptococcus
                                                                                                                                                                                                                                                                                       AAA08444;
                                                                                                                                                                                                                                                                                                            AAA08444 standard; DNA; 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                       (ACTI-)
                                                                                     14-SEP-1999;
                                                                                                                                                                                    Immunoglobulin light chain binding protein; PpL; protein Peptostreptococcus; human immunoglobulin kappa chain; muiimmunoaffinity chromatography; site directed mutagenesis.
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                       ACTINOVA LTD
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                                                                                                                                                                                                                                                              (first entry)
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                                              98GB-0019998
99GB-0009578
                                                                                     99WO-GB03048
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                                                                                                                                                                                                                                     sequence
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                                                                                                                                                                                                                                                                                                             ВP
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Pred. No. 6.5e-44;
0; Mismatches 3
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                                                                                                                                                                                                                                     SEQ
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sis; ds.
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Gore MG,

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RESULT
AAQ50947
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Best Local S
Matches 244
                                                                                                                                                                                           enzyme linked
                                                      repeat_unit
                                                                                                                               repeat_unit
                                                                                                                                                                     Synthetic
                                                                                                                                                                                                        Peptide;
                                                                                                                                                                                                                                Immunoglobulin binding protein
                                                                                                                                                                                                                                                           18-MAY-1994
                                                                                                                                                                                                                                                                                                             AAQ50947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes an immunoglobulin (Ig) binding protein (PI) which has been modified by one or substitutions such that the dissociation constant (Kd).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             with respect to human Ig kappa-chain is 400 nM or more at pH8. Pl is useful in immunoaffinity chromatography. The present sequence encodes a mutant Peptostreptococcus protein L, which is an Ig light chain binding protein, from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 52; 56pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New modified immunoglobulin light chain binding protein, useful immunoaffinity chromatography, has a dissociation constant of 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immunoaffinity chromatography, more at pH8 with respect to hu
                                                                                                                                                                                                                                                                                                                                                                                                                                               181
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gttacaatcaaagttaacttaatctttgcagatggaaagatacaaacagcagaattcaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000-271441/23
)B; AAY82547
                                                                                                                                                                                                       immunoglobulin; binding; analysis;
                                                                                                                                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 115 A; 37 C;
                                                                                                                                                                                           immunoabsorbant assay;
                                                                                                                                                                                                                                                                                                                                                                      249
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                               /note≐
                                                                                                     /note=
                                                                                                                  /*tag=
                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                          cdna;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96.8%;
*Repeat units are not adjacent, repetitions of this sequence are not 100% homologous and begin at nucleotide positions 313, 535 and
                                                                          "Repeat units are not adjacent, repetitions of this sequence are not 100% homologous and begin at nucleotide positions 214, 427 and
                                                                 begin
649"
                                                                                                                                                                                                                                                                                                           876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 241;
Pred. No. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human immunoglobulin kappa-chain -
                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50 G; 47 T; 0 other;
                                                                                                                                                                                                                                gene derived
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.2e-43;
                                                                                                                                                                                                       purification; ELISA;
                                                                                                                                                                                                                              from protein L gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 249;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              constant of 400
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                                                                                                                                                                                                                                                        RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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Best Local
                                                                            Sequence
                                                                                                                                                                                                         AAQ50946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g ELISA. The sy
they are free of
wall binding.
                                   Peptide; immunoglobulin; binding;
                                                                                                                                                                 AAQ50946;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 876 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 analysis, purification procedures and other biochemical processes g. ELISA. The synthetic molecules are of particular advantage if they are free of regions in protein L which exhibit albumin and control to the control of the contro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 13;
                                                                                                                      18-MAY-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The synthetic immunoglobulin binding proteins derived for comprise repeated sequences from protein L which bind immunoglobulin kappa light chains. They can be used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   which bind
cell walls
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P-PSDB; AAR42204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Atkinson A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1992;
24-DEC-1992;
                                                                                                                                                                                                                                                                                                                      868
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAY-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                     aatggtgaatacacagcagacttagaagatggcggatacactatcaacatcaaatttgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggaacatttgaagaagcaacagcagaagcttacagatatgcagacttattagcaaaagta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gttacaatcaaagttaacttaatctttgcagatggaaaaacacaacagcagaattcaaa
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                            encoding
                                                                                                                                                                                                         standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Figure 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     jlobulin binding proteins derived from
immunoglobulin kappa light chains but
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                      87.6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92GB-0009804
92GB-0026928
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                                                                            protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92
95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; 141 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . 98;
                                                                                                                                                                                                         3279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   757"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Murphy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 231.4;
Pred. No. 4.:
                                                                                                                                                                                                         ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                          analysis; purification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JÞ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       171 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Trowern
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .2e-4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Protein L - not albumin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        876;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cell
                                                                                                                                                                                                                                                                                                                                                                                                       867
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                                                                                                                                                                                                                                                                                                                                                                                                                                               240
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0;

enzyme linked

immunoabsorbant

assay;

Peptococcus

magnus

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The synthetic immunoglobulin binding proteins derived from protein L comprise repeated sequences from protein L which bind immunoglobulin kappa light chains. They can be used in protein analysis, purification procedures and other biochemical processes e.g. ELISA. The synthetic molecules are of particular advantage if they are free of regions in protein L which exhibit albumin and cell wall binding (The repeat regions commencing at nucleotide numbers 1045, 1261, 1483 and 1705).
                                                                                                                  Disclosure;
                                                                                                                                                                                                                                                          07-MAY-1992;
24-DEC-1992;
                                                                                                                                       cell walls
                                                                                                                                                 New immunoglobulin binding which bind immunoglobulin )
                                                                                                                                                                                 P-PSDB;
                                                                                                                                                                                            WPI; 1993-368798/46
                                                                                                                                                                                                                                                                                         07-MAY-1993;
                                                                                                                                                                                                                                                                                                              11-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                         repeat_unit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_unit
Sequence 3279 BP; 1505 A; 481 C;
                                                                                                                                                                                                                                                                                                                                   WO9322439-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_unit
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                                                                                                                  Figure 1;
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                                                                                                                                                                                                                                     HEALTH LAB
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92GB-0026928
                                                                                                                                                                                                                                                                                         93WO-GB00950
                                                                                                                                                                                                                                                                                                                                                                                                         2914...2934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "Repeat units are not adjacent, repetitions of this sequence are not 100% homologous and begin at nucleotide position 757"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1822..1938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nd
1045..1158
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                                                                                                                                                                                                                                                                                                                                                                                    /note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "Repeat units are of this sequence begin at nucleot!
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag=
                                                                                                                  28pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or this sequence are not a begin at nucleotide posand 1705"
                                                                                                                                                                                                                                                                                                                                                   "Repeat units are adjacent, repetitions of this sequence are not 100% homologous and begin at nucleotide positions 2935, 2953, 2968, 2986, 3001, 3019 and 3034"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Repeat units are not adjacent, of this sequence are not 100% begin at nucleotide positions and 1597"
                                                                                                                                                                                                                                                                                                                                                                                                                           "Repeat units are not adjacent, of this sequence are not 100% begin at nucleotide positions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Repeat units are of this sequence
                                                                                                                                                                                                                                                                                                                                                                                                                   begin at
2731"
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                                                                                                                                                g proteins de
kappa light
                                                                                                                                                                                                                                     SERVICE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            pear units are not adjacent,
this sequence are not 100%
gin at nucleotide positions
                                                                                                                                                                                                               Murphy
                                                                                                                  English.
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  of this sequence are not 100% homologous an
   begin at nucleotide position 757"
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of this sequence are
begin at nucleotide p
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                                 aatggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgct
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                                                                    ggaacatttgaagaagcaacagcagaagcttacagatatgcagacttattagcaaaagta
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be used as a reagent for immobilising
olumns, in diagnostic tests and in assays.
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                                                                                                                                                                                                                                                                                                                                                                                       polypeptide, protein L - use for immobilising antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Repeat units are adjacent, repetitions of this sequence are not 100% homologous and begin at nucleotide positions 2935, 2953, 2968, 2986, 3001, 3019 and 3034"
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                                                                                                                                                                                                                                                                                             substitutions such that the dissociation constant (Kd) of the protein with respect to human Ig kappa-chain is 400 nM or more at pHB. Pl is useful in immunoaffinity chromatography. The present sequence encodes Peptostreptococcus protein L Ig light chain binding domain, which is given in the disclosure of the present invention.
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P-PSDB;
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                                                                                                                                                                                                                                                                          Sequence 225 BP;
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26-APR-1999;
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            ttagaagatggtggaaaccatatgaacattaaatttgctggaaaa
                                                               gcagaagcttacagatatgcagacttattagcaaaagtaaatggcgaatatacagcagac
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DB; AAY82544.
ttagaagatggcggatacactatcaacatcaaatttgctggaaaa
                                                  gcagaagcttacagatatgcagacttattagcaaaagtaaatggtgaatacacagcagac
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gore
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Immunoglobulin light chain binding protein; PpL; prot Peptostreptococcus; human immunoglobulin kappa chain; immunoaffinity chromatography; ds.
                                                                                                                                                                                                                                                                                                                                                                                                  New modified immunoglobulin light chain binding protein, useful in immunoaffinity chromatography, has a dissociation constant of 400 more at pH8 with respect to human immunoglobulin kappa-chain -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-SEP-1998;
26-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200015803-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptostreptococcus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA08432 standard; DNA;
                                                                                                                                                                                                                                                        Sequence 222
                                                                                                                                                                                                                                                                              Peptostreptococcus protein L Ig light chain binding domain, given in the disclosure of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ACTI-) ACTINOVA LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA08432;
 181
                                               121
                                                                      142
                       202
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                                                                                                                                                                                          Local Similarity 95.0
les 211; Conservative
                                                                                                                     82
                                                                                                                                                                  22
                                                                                                                                                       ΜĠ,
           ttagaagatggtggaaaccatatgaacattaaatttgctgga
                                                          gcagaagcttacagatatgcagacttattagcaaaagtaaatggcgaatatacagcagac
                                                                                                      atctttgcagatggaaagatacaaacagcagaattcaaaggaacattttgaagaagcaaca 141
                                                                                                                                          aaagaaacaccagaacccaaaagaagaagttacaatcaaagttaactta
ttagaagatggtggaaacacaatcaacattaaatttgctgga
                                             gcaaaagcttatgcttatgcaaacttattagcaaaagaaaatggcgaatatacagcagac
                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000-271441/23.
DB; AAY82543.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Beckingham
                                                                                                                                                                                                                                                                                                                                                                               Page 48;
                                                                                                                                                                                                                                                        BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98GB-0019998
99GB-0009578
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                                                                                                                                                                                                                                                       105 A; 35 C; 40 G; 42 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sp.
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                                                                                                                                                                                                      82.1%;
95.0%;
                                                                                                                                                                                                                                                                                                                                                                            56pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                222
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Roberts
                                                                                                                                                                                                                                                                                                                                                                             English.
                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                                                      Score 204.4; DB 2
Pred. No. 2.3e-35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein L domain C3
                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                  DB 21;
 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein L;
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                                                                                                                                                                                                                Length
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                                                                                                                                                                                                                  222;
                                                                                                                                                                                          0,;
                                                                                                                                                                                                                                                                                           which is
                                                                                                                                                                                          Gaps
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Or
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RESULT 11 AAA08431

AAQ50452

standard;

DNA;

921

ВP

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RESULT .
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Matches
                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                    The present invention describes an immunoglobulin (Ig) light chain binding protein (Pl) which has been modified by one or more amino acid substitutions such that the dissociation constant (Kd) of the protein with respect to human Ig kappa-chain is 400 nM or more at pHB. Pl is useful in immunoaffinity chromatography. The present sequence encodes a Peptostreptococcus protein L Ig light chain binding domain, which is given in the disclosure of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           New modified immunoglobulin light chain binding protein, useful in immunoaffinity chromatography, has a dissociation constant of 400 nM more at pH8 with respect to human immunoglobulin kappa-chain -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gore
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ACTI-) ACTINOVA LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-SEP-1998;
26-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-SEP-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunoglobulin light chain binding protei Peptostreptococcus; human immunoglobulin immunoaffinity chromatography; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA08431 standard; DNA; 213
                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptostreptococcus
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                                                                                                                                                                                                                                                Local Similarity
les 199; Conserv
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                                                                                                                                                         tggaaagatacaaacagcagaattcaaaggaacatttgaagaagcaacagccagaagctta
                                                                                                                                                                                                          agaaacaccagaagaaccaaaagaagttacaatcaaagttaaacttaatctttgcaga
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MG
                                                                                              tgcttatgcagacttattagcaaaagaaaatggcgaatatacagcagacttagaagatgg
                                                                                                           cagatatgcagacttattagcaaaagtaaatggcgaatatacagcagacttagaagatgg
                                                                                                                                                                                              agaaaaaccagaagaaccaaaagaagaagttacaatcaaagttaacttaatctttgcaga
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)B; AAY82542.
                                                             | tggaaaccatatgaacattaaatttgctgga
                                              tggaaacacaatcaacattaaatttgctgga
                                                                                                                                             tggaaagacacaacagcagaattcaaaggaacatttgaagaagcaacagcaaaagctta
                                                                                                                                                                                                                                                                                                              213
                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 46-47; 56pp; English.
                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                              BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
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99GB-0009578
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                                                                                                                                                                                                                                                                                                              100 A; 32 C;
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                                                                                                                                                                                                                                                           77.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3316 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Roberts
                                                                                                                                                                                                                                                Score 191.8; DB 21
Pred. No. 1.2e-32;
0; Mismatches 12;
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                                                                                                                                                                                                                                                                                                              40 G;
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                                                                                                                                                                                                                                                                                                              41 T; 0 other;
                                                213
                                                                      243
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PpL;
                                                                                                                                                                                                                                                                        21;
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                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                          213;
                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                              Gaps
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16-MAY-1994

(first entry)

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RESULT 1
AAC84644
ID AAC8
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AC AAC8
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The protein encoded by the sequence (Protein L) is capable binding to immunoglobulin G light chains. It is useful for separating (purifying) and identifying immunoglobulin and removing immunoglobulin molecules from serum. Hybrid prot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 2; Page 37; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bjoerck L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-NOV-1993
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   AAC84644;
                               AAC84644 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 921 BP; 435 A; 128 C; 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New protein L binding light chains of all immunoglobulin classes - for binding purifying and identifying immunoglobulin, also related DNA, vectors and host cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1993-368722/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (HIGH-) HIGHTECH RECEPTOR AB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-APR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Immunoglobulin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           L protein can bind all human immunoglobulin classes and many immunoglobulins from other species. They are highly soluble and retain their binding activity at high temperatures over a pH range of 3-10. They can be immobilised without loss of activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P-PSDB; AAR42993.
                                                                                                                                                                                                                                                                                    707
                                                                                                       887
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                                                                                                                                                                 827
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                                                                                                                                                                                                                                                                                                                                             653 taaatattaaatttgctggaaaagaaa'----aaacaccagaagaaccaaaagaagaag
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                                                                                                                                                                                                                                                                                                                                                                          Ν
                                                                                                    gtaagaaa 894
                                                                                                                     gaaaataa 249
                                                                                                                                                              atggtaaatatacagcagacttagaagatggtggatacactattaatattagatttgcag
                                                                                                                                                                               atggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgctg
                                                                                                                                                                                                                                     gaacatttgaagaagcaacagcagaagcttacagatatgcagacttattagcaaaagtaa
                                                                                                                                                                                                                                                                                                  ttacaatcaaagttaacttaatctttgcagatggaaagatacaaacagcagaattcaaag
                                                                                                                                                                                                                                                                                                                                                            gaacatttgcagaagcaacagcagaagcatacagatacgctgacttattagcaaaagaaa
                                                                                                                                                                                                                                                                                  ttactattaaagcaaacttaatctatgcagatggaaaaactcaaacagcagagttcaaag
                                                                                                                                                                                                                                                                                                                                                                                                      al Similarity
214; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sjoebring
                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92SE-0001331
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immunoglobulin light
                                DNA; 1305 BP
                                                                                                                                                                                                                                                                                                                                                                                                                    72.8%;
86.3%;
                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                    Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                   181.2; DB 1
No. 2.6e-30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               G; 186 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   chain binding
                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 14; Length
                                                                                                                                                                                                                                                                                                                                                                                                        28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  capable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   proteins of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for
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                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                    766
                                                                                                                                                                                             241
                                                                                                                                                                                                                          826
                                                                                                                                                                                                                                                        181
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artificial sweetener; milk; animal
Unidentified.
                                     protein fiber; effluent treatment;
                                                                                                Recombinant;
                                                                                                                                                                           20-APR-2001
                                                                            fusion protein; cellu
y; alcoholic beverage;
                                                                            cellulose binding erage; hydrolysis;
                                   feed enzyme; heparin; heparan sul
detergent; leather; cell signal;
                                                                              peptide; CBP;
whey lactose;
                                                           heparan sulfate
                                                                              cellulose;
aspartame;
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ds

WO200077175-A1

17-MAY-2000; 21-DEC-2000 10-JUN-1999; 2000WO-US13434 99US-0329234

(CBDT-) CBD TECHNOLOGIES LTD (YISS) YISSUM RES & DEV CO. (FRIE/) FRIEDMAN M M.

Shani Z, Shoseyov O;

WPI; 2001-080683/09

Expressing and isolating recombinant protein from plant e.g for use in food industry, involves homogenizing a plant expressing fusion protein including recombinant protein and cellulose binding peptide being fused to it

Example 1; Page 58-59; 64pp; English

purification in industrial processes, for production of protein file for effluent treatment, in combination with detergents in cleaning applications, and in leather manufacturing processes. The present sequence represents a DNA encoding a ProtL-CBDcex peptide, used for construction of CBD-protein-L constructs for expression in transger protein isolated by this method is useful commercially in the food industry, for the hydrolysis of high molecular weight protein, in the manufacture of alcoholic beverages, for the hydrolysis of whey lactose, in the production of the artificial sweetener aspartame, in the reduction of the cooked flavour of milk, in the production of animal feed enzymes, in the sterilization and oxidation of plastics and rubbers, for the production of heparin and heparan sulfate oligosaccharides, for The invention relates to a process of expressing a recombinant prote a plant and isolating the recombinant protein from the plant. The me comprises: (a) providing a plant, a plant derived tissue or cultured (b) homogenizing the plant, plant derived tissue or cultured plant cells such that FP is brought into contact with a plant GBP to CM and forming a matter (CM) to effect affinity binding of FP via CBP to CM and forming a FP-CM complex; and (c) isolating the FP-CM complex. The recombinant protein and a cellulose binding peptide (CBP) being fused to it, FP being compartmentalized so as to be sequestered from the cell walls; plant cells expressing a fusion protein (FP) including a recombinant fibers,

 $\begin{smallmatrix} \mathbf{g} & \mathbf{x} & \mathbf{0} & \mathbf{0}$

Sequence 1305 BP; 495 A; 282 C; 293 G; 235 T; 0 other;

Query Match Best Local Similarity

72.8%;

22;

Qy ·Ωy 밁 밁 Matches 718 664 62 ttacaatcaaagttaacttaatctttgcagatggaaagatacaaacagcagaaattcaaag 121 ttactattaaagcaaacttaatctatgcagatggaaaaactcaaacagcagagttcaaag taaatattaaatttgctggaaaagaaa----aaacaccagaagaaccaaaagaagaag Score 181.2; DB 2 Pred. No. 2:7e-30; 0; Mismatches 28 6 Gaps 717 61

В

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망 δÃ

DB 22;

Length

1305;

1;

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RESULT 1
AAF24725
                                                                                                 quantities of the recombinant proteins and protein products in a simple and cost-effective manner. Recombinant proteins may be used commercially such as in the food processing industry, e.g. glucoamylases and glucose isomerases are used for converting starch to high fructose corn syrup, proteinases for the hydrolysis of high molecular weight proteins and in manufacturing leather or alcoholic beverages, pectinesterases for pectin hydrolysis in food industry, lipases for cleaving ester linkage in triglycerides, and for effluent treatment. The recombinant proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Expressing and isolating recombinant protein in a plant, useful for producing large quantities of recombinant proteins, by expressing a fusion protein including a cellulose binding peptide fused to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CBDT-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein production; protein L; CBD cex |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                 fusion protein including the recombinant protein and a cellulose binding peptide fused to it, where the fusion protein is compartmentalised and sequestered within plant cells, plant derived tissue or cultured plant cells. The method is useful for obtaining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example; Page_72-73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shani-Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-JUN-1999;
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                                                                             may
                                                                                                                                                                                                                                                                                                                                                                                                                                                         The specification describes a method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                recombinant protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-APR-2001
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                        further be used to produce protein antibiotics, which can be used nealing processes, and to produce animal feed enzymes. The present mence represents a protein L and CBD cex fusion protein, which is
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YISSUM RES DEV CO HEBREW UNIV JERUSALEM.
produce the fusion proteins of the
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                                                                                                                                                                                                                                                                                                                                                                                                                             tion describes a method for expressing and protein in a plant. The method comprising
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                                    protein L (AAR42993) is capable of binding to immunoglobulin G light chains. It is useful for binding, separating (purifying) and identifying immunoglobulin and for removing immunoglobulin molecules from serum. This is the coding sequence of one hybrid protein of the L protein. The hybrid proteins can bind all human immunoglobulin classes and many immunoglobulins from other species. They are highly soluble and retean their binding activity at high temperatures over a pH range of 3-10. They can be immobilised
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                                                                                                                                                                                      New protein L binding light chains of all immunoglobulin - for binding purifying and identifying immunoglobulin, a related DNA, vectors and host cells
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                       without loss of activity.
                                                                                                                                                              Claim 6;
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ф Qy В QΥ Ъ Qy В χQ Search completed: June 19, 2002, 18:47:39 Job time: 4120 sec Query Match 72.8 Best Local Similarity 86.3 Matches 214; Conservative 887 gtaagaaa 894 242 gaaaataa 249 827 atggtaaatatacagcagacttagaagatggtggatacactattaatattagatttgcag 886 182 atggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgctg 241 72.8%; Score 181.2; DB.14; Length 1308; 86.3%; Pred. No. 2.7e-30; ative 0; Mismatches .28; Indels 6; .6; Gaps

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ALIGNMENTS

BASE COUNT ORIGIN	FEATURES Source	JOURNAL	TITLE	AUTHORS	REFERENCE		ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION	DEFINITION	LOCUS	AR137037	RESULT 1
/organism="unknown" 402 a 141 c 162 g 171 t	Location/Qualitiers	Patent: US 6162903-A 3 19-DEC-2000;	Duggleby, C.J. Immunoglobulin binding proteins derived from L protein and their	Trowern, A.R., Atkinson, A., Murphy, J.P., Laurence, O.S. and	1 (bases 1 to 876)	Unclassified.	Unknown.	Unknown.		AR137037.1 GI:14478287 .	AR137037	Sequence 3 from patent US 6162903.	AR137037 876 bp DNA linear PAT 16-JUN-2001		

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                                       aatggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgct.240
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                                                                                             al Similarity
237; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    238;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 876)
Trowern, A.R. and Atkinson, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peptostreptococcus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptostreptococcus sp. 1018. Peptostreptococcus sp. 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A75725.1 GI:6065696
                                                                                                                                                                                                                                                                                                                                                                                                 HEALTH LAB SERVICE BOARD (GB);
                                                                                                                                                                                                                                                                                                                                                                                                              Patent: WO 9322439-A 3 11-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Peptostreptococcus.
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                                                                                                                                                                                                                   /translation="metpepeeevtikanlifadgstqnaefkgtfakaysdayad
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                                                                                                                                                                                TPETPEEPKEEVTIKVNLIFADGKTQTAEFKGTFEEATAEAYRYADLLAKVNGEYTAD
LEDGGYTINIKFAGK",
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                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                           note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                    'db_xref="taxon:106273"
                                                                                                                                                                                                                                                                                                  'codon_start=1
                                                                                                      92.5%;
95.6%;
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95.6%;
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                                                                                           Score 230.4; DB (
Pred. No. 5.3e-33;
D; Mismatches 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bacillus/Clostridium group; Clostridiaceae;
                                                                                                                                                                       163
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Pred. No. 3.5e-33;
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/rpt_type=direct 949. .1161

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(574-672) B2

(757-855); B-repeats"

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(856-948); A-repeats"
/function="unknown"

(490-573); A2

(673-756);

A3

/rpt_type=direct

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repeat_unit
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                                                 mat_peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   murpny,J.P., Trowern,A.R. and Duggleby,G.J.
Nucleotide sequence of the gene for peptost
DNA seq. 4 (4), 259-265 (1994)
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Bacteria; Firmicutes; Bacillus/Clostridium
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                                                                                                                                                                                                                                                                                                                                                                                       /translation="MKINKKLLMAALAGAIVVGGGANAYAAEEDNTDNNLSMDEISDA
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IDSATTINAINDIVARADVMEKKTAEKEEAEKLAAAKETAKKHIDELKHLADKTKELAK
KRDIDSATTIDAINDIVARADVMEKKISEKETPEPEEEVTIKANLIFADGSTQNAEFK
                                                                                                                                                 KEAAIKELKEAGITAEYLFNLINKAKTVEGVESLKNEI
                                                                                                                                                                                                                 EAG ITSDLYFSLINKAKTVEGVEALKNEILKAHAGEETPELKDGYATYEEAEAAAKEA
LKNDDVNNAYELVQGADGRYYYVLKIEVADEEEPGEDTPEVQEGYATYEEAEAAAKEA
                                                                                                                                                                                                                                                                  EDGGNT INIKFAGKETPETPEEPKEEVT IKVNLIFADGKTQTAEFKGTFEEATAEAYR
YADLLAKVNGEYTADLEDGGYT INIKFAGKEQPGENPGIT IDEWLLKNAKEEA IKELK
                                                                                                                                                                                                                                                                                                                 GTFAKAVSDAYAYADALKKDNGEYTVDVADKGLTLNIKFAGKKEKPEEPKEEVTIKVN
LIFADGKTQTAEFKGTFEEATAKAYAYADLLAKENGEYTADLEDGGNTINIKFAGKET
PETPEEPKEEVTIKVNLIFADGKIQTAEFKGTFEEATAKAYAYANLLAKENGEYTADL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Finegoldia
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                                                                        LAAAALSTAAGAYVSLKKRK"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="protein
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                                                          Peptostreptococcus sp. Peptostreptococcus sp. Bacteria; Firmicutes; F
Trowern, A.R. and Atkinson, A. IMMUNOGLOBULIN BINDING PROTE
                                                                                                                           A75723.1
                                                                                                                                           Sequence 1 from Patent.
A75723
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                                              Peptostreptococcus
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                                                                                                                                                                                                                                                                              249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="2 E-repeats El
putative; E-repeats"
/function="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /rpt_unit=2914. .2934 3052. .3183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="putative; M-region"
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477 c 623 g 663 t
                                                                                                                           GI:6065694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rpt_type=tandem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="8 R-repeats; putative; R-REPEATS"
/function="charged cell anchor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /evidence=experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="4 D-repeats D1 (1822-2034) D2 (2347-2544) D3 (2545-2730) D4(2731-2913); D-repeats"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /bound_moiety="immunoglobulin kappa light chain"
/function="possible virulence mechanism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="4 C-repeats C1 (949-1161) C2 (1162-1374) C3 (1375-1596) C4(1597-1. ...; C-repeats"
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                              to 3279)
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                                                          Bacillus/Clostridium group; Clostridiaceae;
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                                                                                                                                                      3279 bp
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/protein_id="CAB58545;l"
/db_xref="GI:6065695"
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Pred. No. 5:2e-33;
D; Mismatches 12
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                                                      aatggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgct 240
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Trowern, A.R. and Atkin
PROTEIN L AND PROCESS
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Peptostreptococcus sp. 1018
Bacteria; Firmicutes; Bacillus/Clostridium
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280. 3183
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VEGVEALKNEILKAHAEKPGENPGITIDEWLLKNAKEAAIKELKEAGITAEYLFNLIN
VAKTVEGVESLKNEILKAHAEKPGENPGITIDEWLLKNAKEDAIKELKEAGITSDIYF
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AALAGAIVVGGGANAYAAEEDNTDNNLSMDEISDAYFDYHGDVSDSVDPVEEEIDEAL
AKALAEAKETAKKHIDSLNHLSETAKKLAKNDIDSATTINAINDIVARADVMERKTAE
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480 c 626 g 668 t
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/protein_id="CAB58547.1"
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/strain="1018"
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Pred. No. 5.2e-33;
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                                                                                                                                                                                                                                                                               AATGGTGAATACACAGCAGACTTAGAAGATGGCGGATACACTATCAACATCAAATTTGCT 1815
                                                                                                                                                                                                                                                                                            aatggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgct 240
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                                                                                                                                                         Sequence
AR079000
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Sequence 1
AR137036
                                                   Bjorck, L. and Sjobring, U. Protein L and hybrid proteins there Patent: US 5965390-A 2 12-OCT-1999;
                                                                                                           Unknown
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                                                                                                                                                                             AR079000
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Trowern, A.R., Atkinson, A., Murphy, J.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent: US 6162903-A 1 19-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Immunoglobulin binding proteins derived
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128 c 172 g
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481 c 625 g
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from patent US 6162903
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95.2%;
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Pred. No. 5.2e
0; Mismatches
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                                           atggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgctg
                                                                     GAACATTTGCAGAAGCAACAGCAGAAGCATACAGATACGCTGACTTATTAGCAAAAGAAA
                                                                            gaacatttgaagaagcaacagcagaagcttacagatatgcagacttattagcaaaagtaa 181
                                                                                                       TTACTATTAAAGCAAACTTAATCTATGCAGATGGAAAAACTCAAACAGCAGAGTTCAAAG
                                                                                                                ttacaatcaaagttaacttaatctttgcagatggaaagatacaaacagcagaattcaaag 121
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                                  ATGGTAAATATACAGCAGACTTAGAAGATGGTGGATACACTATTAATATTAGATTTGCAG
                                                                                                                                                                                                                                                                                                                                                Sequence 4 from patent US 596
                                                                                                                                                                                                                                                                   1 (bases 1 to 1308)
Bjorck.L. and Sjobring,U.
Protein L and hybrid proteins there
Patent: US 5965390-A 4 12-OCT-1999;
                                                                                                                                                                                                                                                                                                                Unknown.
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204 c 252 g
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                                                                                                                                                                                   Score 181.2; DB 6
Pred. No. 4.5e-24;
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5965390.
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4.9e-24;
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                                                                                                                                                                                                                                                                              gaacatttgaagaagcaacagcagaagcttacagatatgcagacttattagcaaaagtaa
                                                                                                                                GAACATTTGCAGAAGCAACAGCAGAAGCATACAGATACGCTGACTTATTAGCAAAAGAAA
GTAAGAAA
                                                                               atggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaatttgctg
                                                                                                                                                                                                                                                                  TAAATATTAAATTTGCTGGAAAAGAAA----AAACACCAGAAGAACCAAAAGAAGAAG
                             gaaaataa
                                                                ATGGTAAATATACAGCAGACTTAGAAGATGGTGGATACACTATTAATATTAGATTTGCAG
                                                                                                                                                                                                                                                                                                                                214;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GenBank staff at the National Library of Medicine crentry [NCBI gibbsq 120302] from the original journal This sequence comes from Fig. 2.
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J. Biol. Cl
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Kihlberg,B.M., Sjobring,U., Kastern,W. and Bjorck,L
Protein LG: a hybrid molecule with unique immunogloi
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EKTPEEPKEEYTIKANLIYADGKTQTAEFKGTFEEATAEAYKKDNGEXTVDV
ADKGYTLNIKFAGKEKTPEEPKEEYTIKANLIYADGKTQTAEFKGTFEEATAEAYRYA
DKLAKENGKYTVDVADKGYTLNIKFAGKEKTPEEPKEEVTIKANLIYADGKTQTAEFK
GTFAEAYRAADLLAKENGKYTADLEDGGYTINIFFAGKKVDEKPEEPMDTYKLI
LIGKTLKGETTTEAUDAATAEKVFKQYANDNOYDGEWYYDDAYTGTTVTEKPEVIDAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="recombinant immunoglobulin binding protein; sequence comes from Fig. 2; hybrid construct shows termination codon"
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                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Streptococcus sp."
/db_xref="taxon:1306"
219 c 268 g 293 t
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/protein_id-"AAA03280.1"
/db_xref-"G1:261706"
/translation-"MKKTAIAIAVALAGFATVAQAAVENKEETPETPETDSEEEVTIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ELTPAVTTYKLVINGKTLKGETTTKAVDAETAEKAFKQYANDNGVDGVWTYDDATKTF
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/db_xref="taxon:1260"
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                                                                                                                                                                                                                                                                                                                             Score 181.2; DB 1
Pred. No. 4.5e-24;
0; Mismatches 28
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MEDLINE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Structure of peptostreptococcal protein L and identification of repeated immunoglobulin light chain-binding domain J. Biol. Chem. 267, 12820-12825 (1992)
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Kastern,W., Holst,E., Nielsen,E., Sjobring,U. and Bjorck,I protein L, a bacterial immunoglobulin-binding protein and virulence determinant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Finegoldia magna
Bacteria; Firmicutes;
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Finegoldia magna
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1. .2657
                                                                                              /rpt_type=direct;
/evidence=experimental
591, 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Finegoldia
/strain="312"
                                                                                                                                                                                                                                                                                                                                                                                                              PGNEEKPGNEQKPGNEQKPGNEQKPGNEQKPGNEQKPDQPSKPEKEENGKGGVDSPKK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTFEEATAEAYRYADLLAKENGKYTVDVADKGYTLNIKFAGKEKTPEEPKEEVTIKAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein_id="AAA25612.1"
db_xref="GI:150672"
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                                                                                                                                                                                                                                                                      product="protein
                                                                                                                                                                                                                                                                                             /evidence=experimental
                                                                                                                                                                                                                                                                                                                 /function="binds/kappa
                                                                                                                                                                                                                                                                                                                                                    /gene="protein L"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             translation="MAALAGAIVVTGGVGSYAADEPIDLEKLEEKRDKENVGNLPKFD"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            function="Binds kappa chain of immunoglobulins."
/citation=[2]
/function="one of the five kappa-binding domains"
/fpt_family="B family in protein L gene"
                                                                                                                                                     runction="one of five kappa-binding domains" rpt_family="B family in protein L gene"
                                                                                                                                                                                                                                     'gene="protein L"
                                                           /gene="protein L"
                                                                                                                                                                                        citation=[2]
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          AX022441
Sequence 1 from Patent EP0935612.
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AX022441.1
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/rpt_family="B family in
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /function="region of unknown function"
/rpt_family="C family in protein L gen
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/rpt_family="C family in protein L gen
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Pred. No. 3.9e-24;
0; Mismatches 28;
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in protein L gene"
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KEYWORDS

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                                                                                                                                                                                                                                                                                                                                              Sequence 1 from Patent US6043069
AX030798
                                                                                                                                                                                     Koentgen,F., Suess,G.M., Tarlinton,D.M. and Treutlein,H.R. Catalytic antibodies and a method of producing same Patent: US 6043069-A 1 28-MAR-2000,
AMRAD OPERATIONS PTY LTD (AU)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Koentgen, F., Suess, G.M., Tarlinton, D.M. Precursors of catalytic antibodies Patent: EP 0935612-A 1 18-AUG-1999; AMRAD OPERATIONS PTY LTD (AU)
                                                                                                                                                                                                                                                                                     unidentified
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TAEFKGTFEKATSEAYAYADTLKKDNGEYTVDVADKGYTLNIKFAGKEATNRNTDGST
DYGILQINSRWGGLTLKEEVTIKANLIFANGSTQTAEFKGTFEKATSEAYAYADTLKK
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118 c 129 g 1
 DYGILQINSRWGGLTLKEEVTIKANLIFANGSTQTAEFKGTFEKATSEAYAYADTLKK
           /translation="MKKTAIAIAVALAGFATVAQAAPKDNTEEVTIKANLIFANGSTQ
TAEFKGTFEKATSEAYAYADTLKKDNGEYTVDVADKGYTLNIKFAGKEATNRNTDGST
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/db_xref="GI:10046056"
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                                          /protein_id="CAC09615.1"
/db_xref="GI:10278298"
                                                                                           /note="unnamed protein product"
                                                                                                                           /db_xref="taxon:32644"
                                                                                                                                          organism="unidentified"
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68.0%;
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Pred. No. 5.7e-11;
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Best Local
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                                                                     gaaacaccagaaacaccagaagaaccaaaagaagaagttacaatcaaagttaacttaatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGATAAAGGTTACACCCTGAACATCAAATTCGCGGGTAAAGAA
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GABRIELE MARIA (AU); TARLINTON
HERBERT RUDOLF (AU)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Koentgen, F., Suess, G.M., Tarlinton, D.M. and Tro
Catalytic antibodies and a method of producing
Patent: WO 9915563-A 1 01-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Finegoldia
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AX034619
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                                                                                                                                                                                                  b
                                                                                                                                                                                                               /transl_table=11
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/protein_id="CAC10136.1"
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DYGILQINSRAGGLTLKEEVTIKANLIFANGSTQTAEFKGTFEKATSEAYAYADTLKK
DNGEYTVDVADKGYTLNIKFAG"
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                                                                                                                                                                                                                                                                                                                                                       /organism="Finegoldia
/db_xref="taxon:1260"
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Pred. No. 5.7e-11;
""matches 72;
                                                                                                              Score 109.8; DB
Pred. No. 5.7e-11
0; Mismatches 7
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                                                                                                                                          DB 6;
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ACCESSION
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                                                                               DEFINITION
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                                                                                                                     RESULT
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                                                                                                                                                                                                                                    aaagtaaatggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaa
                                                                                                                                                                                                                                                                                             ttcaaaggaacatttgaagaagcaacagcagaagcttacagatatgcagacttattagca 174
                                                                                                                                                               TTCGCGGGTAAAGAA 228
                                                                                                                                                                                                                  AAAGACAATGGTGAATATACTGTAGATGTTGCAGATAAAGGTTACACCCTGAACATCAAA
                                                                                                                                                                                                                                                                                                                       GAAGAAGTCACGATCAAAGCGAACCTGATCTTTGCAAATGGTAGCACACAAACTGCAGAA 93
                                                                                                                                                                                                                                                                                                                                        tttgctggaaaataa 249
                                                                                                                                                                                                                                                                        TTCAAAGGTACCTTCGAAAAAGCGACCTCGGAAGCTTATGCGTATGCAGATACTTTGAAG
                                                                                                                                                                                                                                                                                                                                                                              140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 12 from Patent Ax022452
                                                              Sequence 12 from Patent US6043069.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Precursors of catalytic antibodies patent: EP 0935612-A 12 18-AUG-1999; AMRAD OPERATIONS PTY LTD (AU)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unidentified
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1 (bases 1 to 539)
            unidentified unidentified
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unclassified
                                                    AX030809.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'note="unnamed protein product"
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                                                    GI:10278307
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                            DB 6;
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                   235 tttgctggaaaataa 249
                                                               154 AAAGACAATGGTGAATATACTGTAGATGTTGCAGATAAAGGTTACACCCTGAACATCAAA 213
214 TTCGCGGGTAAAGAA
                                                                                             175 aaagtaaatggcgaatatacagcagacttagaagatggtggaaaccatatgaacattaaa 234
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                                                                                                                               TTCAAAGGTACCTTCGAAAAAGCGACCTCGGAAGCTTATGCGTATGCAGATACTTTGAAG 153
                                                                                                                                                                                                                    gaagaagttacaatcaaagttaacttaatctttgcagatggaaagatacaaacagcagaa 114
                                                                                                                                                                                                    GAAGAAGTCACGATCAAAGCGAACCTGATCTTTGCAAATGGTAGCACACAAACTGCAGAA
                                                                                                                                                                                                                                                                       140;
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                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                   /translation="mdykddddkgaeevtikanlifangstqtaefkgtfekatseav
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/db_xref="taxon:32644"
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71.8%;
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Pred. No. 1.8e-10;
0; Mismatches 55;
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Search completed: June 19, 2002, 18:42:40 Job time: 7637 sec